

**Position Title**

Aerospace Engineer

**Organization**

RA / AERODYNAMICS & PROPULSION  
BRANCH

**NASA Announcement Number**

DF13D0024

**Vacancy Type**

Case File

**OPM Control Number / Status**

336930800 / Posted

**Salary Range**

\$54,028 - \$83,126

<http://www.usajobs.gov/GetJob/ViewDetails/336930800>

**Open Dates**

02/04/2013 - 02/15/2013

**Pay Plan - Series / Grade (Low, High, Potential)**

GS - 0861 / 09, 11, 13

**Position Information**

Full-Time / Permanent

**Duty Location**

061077029 - Edwards AFB, CA (1)

**Who May Be Considered**

This announcement is open to all qualified U.S. citizens.

**Citizenship Required**

True

**Job Summary**

Primarily performs full aircraft and aircraft component full potential flow and Reynolds-averaged Navier-Stokes (RANS) analyses and design/optimization studies in support of the full complement of Dryden research aircraft, flight testbeds, and flight research experiments.

**Comments**

- Any individual selected for this position must be able to obtain and maintain a security clearance.
- Must complete a financial disclosure statement, if selectee is selected at the GS-11 level.
- Travel and relocation expenses are not authorized.

**Marketing Summary**

NASA, the world's leader in space and aeronautics is always seeking outstanding scientists, engineers, and other talented professionals to carry forward the great discovery process that its mission demands. Creativity. Ambition. Teamwork. A sense of daring. And a probing mind. That's what it takes to join NASA, one of the best places to work in the Federal Government.

**Key Requirements**

1. A one-year probationary period may be required
2. Applicants must possess at least a Bachelor's Degree or equivalent
3. Frequent travel may be required
4. Position subject to a pre-employment drug test
5. Position subject to pre-employment background investigation

**Total number of openings**

1

**Major Duties**

Supports flight research experiments as analysis lead and/or principal investigator. Prepares, submits proposals, and acts as principal investigator for new research projects. Supports preliminary design reviews, critical design reviews, flight readiness reviews, tech briefs, mishap investigation boards, external collaborations and partnerships. Collaborates with management, engineers, and internal as well as external organizations, in conducting research and project support work. Candidate's work efforts will also include developing, maintaining, and improving appropriate computational capabilities and analysis tools in the RA/Flow Physics Group; mentoring branch personnel on applicable tools and analysis techniques; advising branch management and personnel as appropriate; supporting reviews and tech briefs; reviewing, authoring, and presenting reports, conference papers, and journal articles.

Note: Levels of complexity for the GS-09 level would be slightly less than for the GS-11 level.

## General Qualifications

In addition to the Basic Education Requirement, applicants must meet one of the following requirements:

For the GS-9 level:

- a. One year of professional experience in an appropriate field at least equivalent in difficulty and responsibility to GS-7 in the Federal service within or closely related to the specialty for which application was made; or
- b. Completion of all requirements for a master's or equivalent graduate degree in an appropriate field; or
- c. Two full academic years of graduate education in an appropriate field; or
- d. An equivalent combination of experience and graduate study.

For the GS-11 level:

- (a) One year of professional experience in an appropriate field at least equivalent in difficulty and responsibility to GS-9 level work in the Federal service within or closely related to the aerospace technology specialty for which application is made; or
- (b) Completion of all requirements for a doctoral degree (Ph.D. or equivalent) in an appropriate field; or
- (c) Completion of three full academic years of graduate education in an appropriate field; or
- (d) An equivalent combination of experience and graduate education.

Specialized experience for both G-9 and GS-11 levels is defined as follows: Knowledge in full aircraft and aircraft component full potential flow, Euler, and Reynolds-averaged Navier-Stokes (RANS) analyses in support of research aircraft, flight testbeds, and flight research experiments. Position requires established working experience, as demonstrated in prior work experience and list of publications(if applicable), in aerodynamic analyses, design, and/or optimization of aircraft components such as wings, pods, and pylons or full aircraft configurations. Position requires experience in an industry standard aircraft aerodynamics OVERset-grid CFD code such as OVERFLOW as well as a full potential flow aircraft analysis code such as Tranair with aerodynamic design/optimization capabilities. Experience is strongly desired in experimental aerodynamics, wind tunnel testing, flight testing, boundary layer heat/mass transfer, and/or a working familiarity with aircraft stability and controls. Experience with lower-order aerodynamic analysis codes such as DATCOM, boundary layer, vortex lattice analysis, and panel method codes, is desired. Good oral and written communication, presentation, and teamwork skills are required.

## **Educational Qualifications**

### **Basic Education Requirement:**

A bachelor's degree from an accredited college or university with major study in Aeronautical Engineering, Aeronautics, Aerospace Engineering, Astronautical Engineering, Astronautics, Astronomy, Astrophysics, Biomedical Engineering, Ceramic Engineering, Ceramics, Chemical Engineering, Chemistry, Civil Engineering, Computer Engineering, Computer Science, Earth and Planetary Science, Electrical Engineering, Electronics Engineering, Geology, Geophysics, Industrial Engineering, Materials Engineering, Materials Science, Mathematics (Pure or Applied), Applied Mechanics, Engineering Mechanics, Mechanical Engineering, Metallurgical Engineering, Metallurgy, Meteorology, Nuclear Engineering, Nuclear Engineering Physics, Oceanography, Optical Engineering, Physics, Applied Physics, Engineering Physics, Space Science, Structural Engineering, Welding Engineering or other appropriate physical science or engineering field.

Note: Degrees in Engineering Technology are not considered to be qualifying for this position.

## **Requirements**

U.S. citizenship is required.

## How You Will Be Evaluated

NASA uses an automated system (Resumix) that matches the competencies extracted from your resume to the competencies identified by the selecting official for the position. Based on the competencies you match, you are placed in one of three categories identified as 90, 80, or 70 pt. quality categories, which are defined as:

90 pt. Category - Tentatively meets (until subsequent confirmation upon referral) the basic qualification requirements identified in the vacancy announcement and has experience in the same or similar job that has demonstrated superior proficiency in the primary requirements of the position.

80 pt. Category - Tentatively meets (until subsequent confirmation upon referral) the basic qualification requirements identified in the vacancy announcement and demonstrates satisfactory proficiency in the primary requirements of the position.

70 pt. Category - Fails to meet criteria described in the 80 pt. category.

Additional application guidance is available in NASA's *Applicant Guide* ([https://resume.nasa.gov/applicant\\_guide.html](https://resume.nasa.gov/applicant_guide.html)).

Information for Veterans: The Category Rating Process protects the rights of veterans by placing them ahead of non-preference eligibles within each category. Preference eligibles who meet qualification requirements and have a compensable service-connected disability of at least 10 percent must be listed at the top of the highest quality category, except when the position being filled is scientific or professional at the GS-09 grade level or higher.

For the purpose of the Career Transition Assistance Program (CTAP) and the Interagency Career Transition Assistance Program (ICTAP), candidates rated in the top quality category are considered well-qualified.

## Benefits

NASA offers excellent benefit programs and competitive salaries. To learn more about pay and benefits at NASA, click *HERE* (<http://nasajobs.nasa.gov/benefits/benefits.htm> target=\_blank).

## Other Information

Any applicant tentatively selected for this position may be required to undergo a pre-employment background investigation.

Individuals who have special priority selection rights under the Agency Career Transition Assistance Program (CTAP) or the Interagency Career Transition Assistance Program (ICTAP) must be well qualified for the position to receive consideration for special priority selection. See 'How You Will Be Evaluated' for definition of well qualified.

Federal employees seeking CTAP/ICTAP consideration must indicate their eligibility when applying for a position. The USAJOBS resume asks you to identify your ICTAP eligibility; the NASA Supplemental Information asks you to identify your CTAP eligibility. If you are selected for the position, you must be prepared to submit proof that you meet the requirements for CTAP/ICTAP. This includes a copy of the agency notice, a copy of their most recent Performance Rating and a copy of their most recent SF-50 noting current position, grade level, and duty location.

As a condition of employment, male applicants born after December 31, 1959, must certify that they have registered with the Selective Service System, or are exempt from having to do so under the Selective Service Law.

In order to receive preference in hiring, you must clearly identify your claim for veterans preference on your resume.

U.S. citizenship is required. NASA's *Applicant Guide* ([https://resume.nasa.gov/applicant\\_guide.html](https://resume.nasa.gov/applicant_guide.html) *target=\_blank*) provides the information needed to assist you in determining whether or not you can claim 5 or 10 point veterans preference. You should not submit documents to prove your eligibility for veterans preference at this time. However, you must be prepared to submit proof of veterans preference (DD-214, and, if claiming 10-point preference, SF-15 plus proof required by that form) as requested by the Human Resources Office. Veterans preference will only be considered based on what is supported. For instance, if you claim 10-point preference, but are only able to document 5-point preference, you will be considered accordingly. If you fail to provide the required documents within the stated time period, we may withdraw a job offer and/or remove you from further consideration.

Your USAJOBS account asks you to assign a name to each of your resumes. When you apply to a NASA position, we will show you the text of the resume you have submitted, but we do not maintain the name you have assigned to that resume. If you wish to keep track of that information, we recommend you make note of it at the time you apply.

Any applicant tentatively selected for this position will be required to submit to screening for illegal drug use prior to appointment and will be subject to random drug tests while occupying the position.

Travel and relocation expenses are not authorized.

Any individual selected for this position must be able to obtain and maintain a security clearance.

Frequent travel may be required.

### **How to Apply**

This vacancy is being filled through NASA STARS, an automated Staffing and Recruitment System. NASA partners with USAJOBS in providing a seamless application process. Before you begin the application process, please read the vacancy announcement carefully and have all required information available. You may begin the process of submitting your resume by clicking on the 'Apply Online' link.

In order to be considered, you must submit a resume completed on the USAJOBS site. When completing your USAJOBS resume, please remember that NASA limits resumes to the equivalent of approximately SIX typed pages, or approximately 22,000 characters including spaces. You will NOT be allowed to complete the application process if your resume is too long or if your resume was uploaded to USAJobs from a second source. Additionally, NASA does not accept documents attached through USAJobs' document attachment feature.

Once you submit your resume to NASA, you will be asked to complete a short series of additional questions. You must finish the entire process in order to have a complete application package and receive consideration. Your answers will not be saved unless you finish the entire application.

You may edit a previously-submitted application, if the announcement is still open. For more information, see the *Applicant Guide*. ([https://resume.nasa.gov/applicant\\_guide.html](https://resume.nasa.gov/applicant_guide.html) target=\_blank)

If you are unable to apply electronically for this position, submit your resume and supplemental questions to: National Aeronautics and Space Administration (NASA), Resume Operations Center, Mailstop: HS50, Marshall Space Flight Center, AL 35812. DO NOT submit your resume directly to the Center advertising this vacancy. Mailed resumes must be received by the close of business on the closing date of the announcement. Hard copy resumes requirements are provided at: *Hard Copy Resume Requirements* (<http://nasajobs.nasa.gov/howtoapply/hardcopyresumes.htm> target=\_blank).

If you are a first time applicant, we recommend that you review NASA's *Applicant Guide* ([https://resume.nasa.gov/applicant\\_guide.html](https://resume.nasa.gov/applicant_guide.html) target=\_blank) to ensure that you are providing a complete resume. Failure to submit the supplemental data and a resume that contains all of the required information may result in loss of consideration for positions in which you are interested.

All applications must be received no later than midnight Eastern Time on the closing date of the announcement.

## **Required Documents**

NASA's application process has been specifically developed to ensure that we only ask you for the information we absolutely need to evaluate your qualifications and eligibility. In order to apply for this position, you only need to submit your resume and answer the screening questions and supplemental information. No additional documentation is accepted at the time of application. (For example you need not submit narrative 'KSA' statements; they are not required and will not be evaluated.) In this way we allow you to focus on preparing a resume that best describes your background and abilities. For assistance in preparing your resume, consult the *Applicant Guide* ([https://resume.nasa.gov/applicant\\_guide.html](https://resume.nasa.gov/applicant_guide.html) *target=\_blank*).

Nothing further is required until requested by the Human Resources Office. At that point, we may ask you to submit documentation to support statements made in your resume. For example, we may ask you to provide academic transcripts or proof of Federal employment status. If you are claiming veterans' preference, we may ask you to submit proof of veterans preference (DD-214, and, if claiming 10-point preference, SF-15 plus proof required by that form). If you fail to provide the required documents within the stated time period, we may withdraw a job offer and/or remove you from further consideration.

## **Contact**

Nancy Campbell / / [nancy.campbell-1@nasa.gov](mailto:nancy.campbell-1@nasa.gov)

## **What to Expect Next**

Candidates for NASA positions are evaluated using our automated staffing and recruitment system, NASA STARS, which compares your skills and experience as described in your resume with the requirements of the position. If you are found to be a highly qualified candidate, you will be referred to the selecting official for further consideration. (In some cases, individuals with priority for special consideration must be considered and selected before other candidates.) Whether or not you are contacted for an interview depends upon the location of the position and the judgment of the selecting official.

At NASA, we pride ourselves on efficient and timely recruitment actions, and you can normally expect to learn the outcome of the selection process in a fairly short period of time. In addition, to ensure that you can measure progress for yourself, NASA provides you with regularly updated information on the status of the vacancy announcement.